

REMARKS

This application has been reviewed in light of the Office Action dated February 22, 2005. Claims 1 - 11 have been cancelled without prejudice and without disclaimer of subject matter. Claims 12 - 17 have been added, and are the only claims are presented for examination. Claims 12, 16 and 17 are in independent form. Favorable reconsideration is requested.

In the outstanding Office Action, Claims 1 - 11 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The new claims have been drafted with careful attention to the points raised in the Examiner's comments relating to this rejection. In particular, the claims now recite more clearly that the color gamut mapping is executed by using the gradation line obtained in the first color gamut. This feature is clearly supported by the disclosures of Fig. 3 and Figs. 19-24. All the claims are believed to comply fully with the requirements of Section 112, and the withdrawal of this rejection is respectfully requested.

Claims 1-4 and 6-11 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,185,661 (Ng). In addition, Claim 5 was rejected under 35 U.S.C. § 103(a) as being obvious from Ng in view of U.S. Patent 6,058,207 (Tuijn et al.).

As is described in much greater detail in the present application, the present invention is intended to provide further improvement in techniques for mapping from one color gamut, typically that of a monitor or the like, into another color gamut, for example that of a printer. Conventional mapping techniques encounter various problems, including the production of undesirable results where ordinary non-linear mapping techniques yield excessive rates of change in the mapping. The aspects of the present invention to which

the respective independent claims are directed are intended to mitigate or solve this problem.

Independent Claim 12 is directed to an image processing method which maps a first color gamut into a second color gamut, in which first sample points in the first color gamut are set, and second sample points are obtained by mapping the first sample points to the second color gamut. A gradation line is set by using the plural first sample points, and is mapped by using the second sample points corresponding respectively to the plural first sample points. An input color then is mapped to the second color gamut by using the mapped gradation line.

Ng relates to one method of the color gamut mapping, as illustrated in Figs. 7 and 8. In the *Ng* system, color interpretation errors of a color filter set of a scanner are partially corrected for by a 3 x 3 transform matrix, and a non-linearly loaded LUT performs further correction of errors for outlying datapoints in the printer color space. A color gamut compression LUT is used to effect non-linear compression on each axis of the color space, providing a substantially one-to-one correspondence in internal regions of the output color gamut, but with non-linear compression near the boundaries.

As is apparent, in *Ng*, the input color data is mapped by using an already-set color gamut mapping condition. Nothing has been found, or pointed out, in *Ng* that would teach or suggest a technique that uses the specific operation of the method of Claim 12, setting first sample points in the first color gamut; obtaining second sample points by mapping the first sample points to the second color gamut; setting a gradation line by using the plural first sample points, mapping the gradation line by using the second sample points corresponding respectively to the plural first sample points, and mapping the input color to

the second color gamut by using the mapped gradation line. Accordingly, Claim 12 is deemed to be clearly allowable over Ng.

Independent Claims 16 and 17 are, respectively, an apparatus and a computer-medium claim corresponding to method Claim 12, and are deemed allowable over Ng for at least the reasons discussed above with regard to Claim 12.


A review of the other art of record has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as a reference against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from independent Claim 12, and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Leonard P. Diana", is written over a horizontal line.

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